

AMENDMENT

In the Claims:

Please cancel claims 114, 115, 165, 166, 173, 209, 210 without prejudice or disclaimer.

Please amend claims 110, 113, 116-125, 137, 152, 157, 164, 167, 168, 174-177, 181-183, 185, 190, 194 and 203-207 so that the text of the amended claim reads as follows:

110. (Amended) An isolated nucleic acid molecule comprising a nucleic acid sequence that encodes:

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- (a) a polypeptide having the amino acid sequence of SEQ ID NO:2; or
 - (b) a polypeptide that comprises a contiguous sequence of at least 16 amino acids from SEQ ID NO:4, of at least 20 amino acids from SEQ ID NO:45, of at least 20 amino acids from SEQ ID NO:47 or of at least 125 amino acids from SEQ ID NO:50.

D₂

113. (Amended) An isolated nucleic acid molecule comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least 16 amino acids from SEQ ID NO:4, of at least 20 amino acids from SEQ ID NO:45, of at least 20 amino acids from SEQ ID NO:47 or of at least 125 amino acids from SEQ ID NO:50.

D₃

116. (Amended) The isolated nucleic acid molecule of claim 113, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least 25 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

117. (Amended) The isolated nucleic acid molecule of claim 116, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 30 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

118. (Amended) The isolated nucleic acid molecule of claim 117, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 40 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

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119. (Amended) The isolated nucleic acid molecule of claim 118, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 50 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

120. (Amended) The isolated nucleic acid molecule of claim 119, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 60 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

121. (Amended) The isolated nucleic acid molecule of claim 120, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 70 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

122. (Amended) The isolated nucleic acid molecule of claim 121, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 80 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

123. (Amended) The isolated nucleic acid molecule of claim 122, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 90 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

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124. (Amended) The isolated nucleic acid molecule of claim 123, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 100 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

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125. (Amended) The isolated nucleic acid molecule of claim 124, comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least 125 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

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137. (Amended) An isolated nucleic acid molecule comprising a nucleic acid sequence that encodes a P-TEFb large subunit protein, wherein said P-TEFb large subunit protein binds to a P-TEFb kinase subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation and wherein said nucleic acid molecule comprises the nucleotide sequence of:

the coding sequence of a cDNA molecule present in a nucleic acid library, wherein the cDNA molecule hybridizes to a probe having the sequence of the complement of SEQ ID NO:3, SEQ ID NO:43 or SEQ ID NO:48 under conditions of high stringency comprising hybridization in 50% formamide, 5× Denhardt's solution, 5× SSC, 25 mM sodium phosphate, 0.1% SDS and 100

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μg/ml of denatured salmon sperm DNA at 42°C for 16 h followed by 1h sequential washes with 0.1× SSC, 0.1% SDS solution at 60°C.

152. (Amended) An isolated nucleic acid molecule comprising:

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- (a) a first nucleic acid sequence that encodes a P-TEFb small subunit protein that has kinase activity and binds to a P-TEFb large subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation, wherein said P-TEFb small subunit protein exhibits at least 90% identity to the amino acid sequence set forth in SEQ ID NO:2 or SEQ ID NO:6; and
 - (b) a second nucleic acid sequence that encodes a P-TEFb large subunit protein that binds to a P-TEFb kinase subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation, wherein said P-TEFb large subunit protein exhibits at least 90% identity to the amino acid sequence set forth in SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.
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157. (Amended) An expression system comprising:

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- (a) a first expression unit comprising, under the transcriptional control of a promoter, a first nucleic acid sequence that encodes a P-TEFb small subunit protein that has kinase activity and binds to a P-TEFb large subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation, wherein said P-TEFb small subunit protein exhibits at least 90% identity to the amino acid sequence set forth in SEQ ID NO:2 or SEQ ID NO:6; and

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(b) a second expression unit comprising, under the transcriptional control of a promoter, a second nucleic acid sequence as defined in claim 137 or claim 149.

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164. (Amended) The expression system of claim 157, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least 16 amino acids from SEQ ID NO:4, of at least 20 amino acids from SEQ ID NO:45, of at least 20 amino acids from SEQ ID NO:47 or of at least 125 amino acids from SEQ ID NO:50.

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167. (Amended) The expression system of claim 166, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 50 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

168. (Amended) The expression system of claim 167, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least about 100 amino acids from SEQ ID NO:4, SEQ ID NO:45 or SEQ ID NO:47.

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174. (Amended) The expression system of claim 168, wherein said second expression unit comprises a second nucleic acid sequence that has the nucleotide sequence of SEQ ID NO:44.

175. (Amended) The expression system of claim 168, wherein said second expression unit comprises a second nucleic acid sequence that has the nucleotide sequence of SEQ ID NO:46.

176. (Amended) The expression system of claim 168, wherein said second expression unit comprises a second nucleic acid sequence that has the nucleotide sequence of SEQ ID NO:49.

177. (Amended) The expression system of claim 157, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide that exhibits between 91% and about 95% identity to the amino acid sequence set forth in SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

181. (Amended) An expression system comprising:

- (a) a first expression unit comprising, under the transcriptional control of a promoter, a first nucleic acid sequence that encodes a polypeptide and that comprises the nucleotide sequence of the coding sequence of a cDNA molecule present in a nucleic acid library, wherein the cDNA molecule hybridizes to a probe having the sequence of the complement of SEQ ID NO:1 or SEQ ID NO:5 under conditions of high stringency comprising hybridization in 50% formamide, 5× Denhardts' solution, 5× SSC, 25 mM sodium phosphate, 0.1% SDS and 100 µg/ml of denatured salmon sperm DNA at 42°C for 16 h followed by 1h sequential washes with 0.1× SSC, 0.1% SDS solution at 60°C; and
- (b) a second expression unit comprising, under the transcriptional control of a promoter, a second nucleic acid sequence as defined in claim 137 or claim 149.

182. (Amended) The expression system of claim 181, wherein said first expression unit comprises a first nucleic acid sequence that comprises the nucleotide sequence of the coding sequence of a cDNA molecule present in a nucleic acid library, wherein the cDNA molecule hybridizes to a probe having the sequence of the complement of SEQ ID NO:5 under said conditions of high stringency.

183. (Amended) The expression system of claim 181, wherein said first expression unit comprises a first nucleic acid sequence that comprises the nucleotide sequence of the coding sequence of a cDNA molecule present in a nucleic acid library, wherein the cDNA molecule hybridizes to a probe having the sequence of the complement of the nucleotide sequence from position 115 to position 1327 of SEQ ID NO:1 under said conditions of high stringency.

185. (Amended) The expression system of claim 181, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least 16 amino acids from SEQ ID NO:4, of at least 20 amino acids from SEQ ID NO:45, of at least 20 amino acids from SEQ ID NO:47 or of at least 125 amino acids from SEQ ID NO:50.

190. (Amended) The expression system of claim 181, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide and that comprises the nucleotide sequence of the coding sequence of a cDNA molecule present in a nucleic acid library, wherein the cDNA molecule hybridizes to a probe having the sequence of the

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complement of SEQ ID NO:3, SEQ ID NO:43 or SEQ ID NO:48 under conditions of high stringency comprising hybridization in 50% formamide, 5× Denhardt's solution, 5× SSC, 25 mM sodium phosphate, 0.1% SDS and 100 µg/ml of denatured salmon sperm DNA at 42°C for 16 h followed by 1h sequential washes with 0.1× SSC, 0.1% SDS solution at 60°C.

D₁₄
194. (Amended) The expression system of claim 181, wherein said second expression unit comprises a second nucleic acid sequence that encodes a polypeptide that exhibits between 91% and about 95% identity to the amino acid sequence set forth in SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50

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203. (Amended) The recombinant host cell of claim 198, wherein said cell comprises an isolated nucleic acid molecule comprising a nucleic acid sequence that encodes:

- (a) a polypeptide having the amino acid sequence of SEQ ID NO:2; or
- (b) a polypeptide that comprises a contiguous sequence of at least 16 amino acids from SEQ ID NO:4, of at least 20 amino acids from SEQ ID NO:45, of at least 20 amino acids from SEQ ID NO:47 or of at least 125 amino acids from SEQ ID NO:50.

204. (Amended) The recombinant host cell of claim 198, wherein said cell comprises an isolated nucleic acid molecule comprising a nucleic acid sequence that encodes a polypeptide that comprises a contiguous sequence of at least 16 amino acids from SEQ ID NO:4, of at least 20 amino acids from SEQ ID NO:45, of at least 20 amino acids from SEQ ID NO:47 or of at least 125 amino acids from SEQ ID NO:50.

205. (Amended) The recombinant host cell of claim 198, wherein said cell comprises an isolated nucleic acid molecule comprising a nucleic acid sequence that encodes a P-TEFb large subunit protein, wherein said P-TEFb large subunit protein binds to a P-TEFb kinase subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation and wherein said nucleic acid molecule comprises the nucleotide sequence of:

the coding sequence of a cDNA molecule present in a nucleic acid library, wherein the cDNA molecule hybridizes to a probe having the sequence of the complement of SEQ ID NO:3, SEQ ID NO:43 or SEQ ID NO:48 under conditions of high stringency comprising hybridization in 50% formamide, 5× Denhardts' solution, 5× SSC, 25 mM sodium phosphate, 0.1% SDS and 100 µg/ml of denatured salmon sperm DNA at 42°C for 16 h followed by 1h sequential washes with 0.1× SSC, 0.1% SDS solution at 60°C.

206. (Amended) The recombinant host cell of claim 198, wherein said cell comprises an isolated nucleic acid molecule comprising a nucleic acid sequence that encodes a P-TEFb large subunit protein that exhibits at least 90% identity to the amino acid sequence set forth in SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50, wherein said P-TEFb large subunit protein binds to a P-TEFb kinase subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation.

207. (Amended) The recombinant host cell of claim 198, wherein said cell comprises an isolated nucleic acid molecule comprising:

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- (a) a first nucleic acid sequence that encodes a P-TEFb small subunit protein that has kinase activity and binds to a P-TEFb large subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation, wherein said P-TEFb small subunit protein exhibits at least 90% identity to the amino acid sequence set forth in SEQ ID NO:2 or SEQ ID NO:6; and
- (b) a second nucleic acid sequence that encodes a P-TEFb large subunit protein that binds to a P-TEFb kinase subunit protein to form a P-TEFb enzyme complex that promotes transcription elongation, wherein said P-TEFb large subunit protein exhibits at least 90% identity to the amino acid sequence set forth in SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

REMARKS

I. Status of the Claims

Prior to the instant Action, claims 110-216 were in the case and have been examined. Presently, claims 114, 115, 165, 166, 173, 209, 210 have been canceled without prejudice or disclaimer. Claims 110, 113, 116-125, 137, 152, 157, 164, 167, 168, 174-177, 181-183, 185, 190, 194 and 203-207 have been amended to even further improve their clarity. No claims have been added.

Claims 110-113, 116-164, 167-172, 174-208 and 211-216 are therefore in the case. According to 37 C.F.R. § 1.121, and for the convenience of the Examiner, a clean copy of the pending claims is included as **Exhibit A** and a copy of the pending claims showing the present revisions is included as **Exhibit B**.